## SCHOOL SCIENCE AND MATHEMATICS

1958

## INDEX BY TITLES

A

Accelerated Work in Mathematics, Methods of Selecting Freshmen for. W. J. CHERRY	467
Algebra, A Non-Commutative. CLARENCE R. PERISHO	727
Algebra: A Study, Difficulties in. G. H. MILLER	714
Algebra of Complex Numbers. WARREN STRICKLAND	690
Algebra Without x's. GERTRUDE V. PRATT	93
Allergies May Be Factor in Childhood Leukemia	319
Antarctic Glaciers Show Little Change in 46 Years	691
Antibiotic Stops Brain-Killing Fungus, New	403
Anticoagulant Drug Helps Asthma Also	260
Anti-Leukemia Drugs Developed, New	471
Arctic Shipping Lanes Will Be Opened, New. Argonne National Laboratory, Past, Present, and Future. STUART McLAIN.	261
Argonne National Laboratory Summer Program.	273
Arithmetic Curriculum, Unifying Ideas in the. RICHARD D. CRUMLEY.	341
Aspirin's Action Is Revealed, Secret of	164
Atlantic Loses Six Million Tons of Water, Each Second	557
Atomic Defense, Educating the High School Student for. EDWIN J. SCHILLINGER	371
Atomic Energy Concepts of Children in Third and Sixth Grade. Doris Young	535
Atomic Reactor Incapable of Exploding, Can Build	366
Automatic Computer Controls Air Traffic, First	89
Automatic Device Aids Bad Weather Flying.	477
· ·	
В .	
Bactericidal Gas May Aid Sterilization, New	495
Bee-Venom Extract Helps Those Who Get Stung Beginning Science Teachers Need?, What Kind and Amount of Help Do Our.	730
Beginning Science Teachers Need?, What Kind and Amount of Help Do Our.	
EDWARD VICTOR	550
Bell Laboratories and New York University to Establish Graduate Facility	64
Biology Teacher, Training of the High School. Addison E. Lee	521
BOOK REVIEWS:	
A New Geometry for Secondary Schools—Herberg, Orleans. J. BRYCE LOCKWOOD	665
Algebra, Book One, Revised Edition—Welchons, Krickenberger, Pearson. A. S.	500
RICHERT.  Algebra, Book Two, Revised Edition—Welchons, Krickenberger, Pearson. A. S.	300
RICHERT	500
Arithme-Stick and Guide for Your Arithme-Stick. J. BRYCE LOCKWOOD	666
Basic Physics (2 volumes)—Efron. J. BRYCE LOCKWOOD	328
Calculus with Analytic Geometry—Johnson, Kiokemeister, Cecil B. Read	242
Calculus with Analytic Geometry—Johnson, Kiokemeister. Cecil B. Read Chemistry, A Basic Science—Hogg, Alley, Bickel. Elaine Zimmerman	243
Chemistry, Man's Servant-Fliedner, Teichman. GERALD OSBORN	666
College Algebra, Fourth Edition-Rosenback, Whitman. CECIL B. READ	750
Creative Science Series—Ress (ed.). George G. Mallinson	583
Economic Models, An Exposition—Beach. CECIL B. READ	161
Elements of Mathematical Biology—Lotka. George G. Mallinson	752
Ernest Rutherford, Atom Pioneer—Rowland. B. CLIFFORD HENDRICKS.	160
Foundations of Life Science—Graubard. LEO C. VANDERBEEK	
Fundamental Mathematics—Miller. CECIL B. READ	241
Health and Fitness—Meredith. MERRILL R. WISEMAN.  Insights Into Modern Mathematics—National Council of Teachers of Mathe-	243
matics Bruce F Mexanus Addonar Council of Teachers of Mathe-	329
matics. Bruce E. Meserve	349
Urbancek, Hollister. HERBERT HANNON.	498
Living Chemistry, Second Revised Edition-Ahrens, Bush, Easley. GERALD	170
OSBORN	160
Microwave Measurements-Ginzton. WALTER G. MARBURGER	330
Niels Henrick Abel, Mathematician Extraordinary—Ore, CECIL B. READ	243
Physical Science for Liberal Arts Students-Swenson, Woods, J. BRYCE LOCK-	
WOOD.	80
Plane Geometry—Schacht, McLennan, Groswold. J. Bryce Lockwood	79
Principles in Biology, Second Edition-Whaley, Breland, Heimsch, Schrank,	
Phelps. Leo C. Vanderbeek.	499

Principles of Physical Science—Bonner, Phillips. J. Bryce Lockwood  Qualitative Analysis—Moeller. Gerald Osborn	415 750
wood. GEORGE G. MALLINSON.  Teaching of Science in the Secondary School—Burnett. E. WAYNE GROSS.  The Book of Popular Science (10 volume series). GEORGE G. MALLINSON.  The New Applied Mathematics, Fifth Edition—Lasley, Mudd. J. BRYCE LOCK-	751 501 80
WOOD. The Principles of Heredity, Fifth Edition—Snyder, David. George G. Mallinson The Rise and Fall of Ye District School in Plymouth Plantation (1800-1900)—	582 81
Vinal, Glen W. Warner	581
Trigonometry—Smith, Hanson. J. BRYCE LOCKWOOD	415
Trigonometry for Secondary Schools—Butler, Wren, Sears. CECIL B. READ.	331
UNESCO Source Book for Science Teaching. B. CLIFFORD HENDRICKS	82
Van Nostrand's Scientific Encyclopaedia, Third Edition. George G. Mallinson Vertebrates of the United States—Blair, Blair, Cagle, Moore, Thane S. Robinson	582 161
Working with Children in Science—Hubler. Lucille Gross	416
Books and Teaching Aids Received	
C	
	4.4
Calculus: A Trigonometric Procedure. John J. AEBERLY	44
"Calculus: A Trigonometric Procedure", A Reply to. CHARLES D. KUGLIN and	362
RICHARD E. STEARNS.  "Calculus: A Trigonomertic Procedure", Author's Comments on. John J. Aeberly "Calculus: A Trigonometric Procedure" by John J. Aeberly, Notes on. George G.	361
MALLINSON "Calculus: A Trigonometric Procedure", Reactions to. George G. Mallinson	285
"Calculus: A Trigonometric Procedure", Reactions to. George G. Mallinson	360
Camera Takes and Develops Slides, New Land	260
Cancer Cells, Low Oxygen Supply Forces Death Upon Cancer Vaccine, New Research Supports Hope for	702 276
Candidates for 1058 Flortion	255
Career in Engineering and Science, The Co-op Education Path To a. NATHANIEL	200
Stewart	175
STEWART. CASMT Progress Report. LOUIS PANUSH.	316
Castor Oil in Dash Boards Makes Car Driving Safer	276
Cathode Ray Tube Apparatus, Simple. HARALD C. JENSEN	274
Central Association of Science and Mathematics Teachers Centripetal or Centrifugal Force? Charles A. Compton	229 672
Chemical Experiments Produce Power Directly from Energy	495
Chemistry Examination, ACS-NSTA High School	107
Chemistry Examination, ACS-NSTA High School	
HAROLD J. ABRAHAMS.  Chemistry Test, Two New Tests, Are Featured by the ACS Examinations Commit-	111
Chemistry Test, Two New Tests, Are Featured by the ACS Examinations Commit-	100
tee, High School. Cholesterol Problem, Even Seaweed Has.	489 384
Clip and File. MILDRED CAMPBELL.	444
Coefficients in Expansions of Polynomials. D. MAZKEWITSCH.	703
College Mathematics Teacher, The. MARC A. LAFRAMBOISE	108
College Science Courses Scientific?, Are. PAUL WESTMEYER Concrete Saves Building Time and Money, New Light	560
Concrete Saves Building Time and Money, New Light	592
Convention Program—General Outline, Highlights of the 1958. CLYDE T. McCor- MICK.	567
Convention Program-Section Meetings and Luncheon Program, Highlights of the	501
1958. CLYDE T. McCormick. Cutting Circular Disks. Harald C. Jensen.	654
Cutting Circular Disks. Harald C. Jensen	712
n.	
Demonstration Galvanometer for the Science Classroom, A Sensitive. LAWRENCE J.	
Delaney	61
Delaney. Device for Measuring Understanding of the Meaning of Units of Measure. Joyce M.	-
BURCHENAL	601
Diamonds Going Into Mass Production Soon, Man Made	118
Difference Equations in Behavioral Diffusion Theory, On the Use of. HENRY WIN- THROP	449
Difficulties of Different Types of Items on Tests for High School Science, The Rela-	117
tive. Jacqueline Buck Mallinson	297
Disney Science Films Now Available for Educational Showing	296
Ditoxin, The. Panos D. Bardis	540

e. Robert A. Fertig	148
e. Robert A. Fertig. Education, Challenges to. Harold Plumier. Education in an Age of Technology. Howard A. Meyerhoff.	562
Education in an Age of Technology. Howard A. Meyerhoff	509
Educational Problems in the United States with Particular Reference to Mathe-	
matics and Science, Some Observations on HAROLD C. UREV	168
Electro-Jet Current, Exact Location Found for.  Elementary School, Purposeful Science Activity in the. Robert E. Drew and	55
Elementary School Purposeful Science Activity in the ROBERT F. DREW and	200
HAROLD P. HUNCEBEORD	205
HAROLD R. HUNGERFORD. Elementary School Science Library for 1956-57, The. Paul E. Kambly and Eleanor	200
Elementary School Science Library for 1950-51, The. PAUL E. KAMBLY and ELEANOR	470
E. Ahlers. Elementary School Science Vocabulary, Super Chargers for. Pearl Astrid Nelson	478
Elementary School Science Vocabulary, Super Chargers for, Pearl Astrib Nelson	354
Elementary Science, Creativity in the Teaching of ILLA PODENDORF	286
Equation $ax-by=c$ , On the. D. MAZKEWITSCH.  Equations of Some Common Geometric Figures. John L. Spence.	741
Equations of Some Common Geometric Figures. John L. Spence.	674
Evaporation Causes High Water Loss	726
Evaporation Causes High Water Loss Exceptional Student in Space Age Science, Utilizing the. MALCOLM H. FILSON	731
Exhibit as a Supplementary Method: The Survivors, The. HAROLD J. ABRAHAMS	1
J. Linkson	-
F	
Factoring the Trinomial $ax^3+bx+c$ When $a>1$ . Doyne Holder	548
Fall into Cold Water Can Cause Death, Sudden	174
Fat Substitute for Imported Cocoa Butter	249
Fertilizers, Plastics and Cattle Feed from Southwestern Washington Coals. CHARLES	247
Wis por Journal	529
WILFORD JOHNSON	
Film Coating Invented, Electrically Conducting	337
Film Made from Aluminum "Rust," Millionth-of-an-Inch.	346
Film Made from Aluminum "Rust," Millionth-of-an-Inch. Fluoridation of Private Water Supplies Now Possible	592
Food Additives Keeps Fats and Oils Fresh	66
Freezing of Water in Vacuo and the Uncertainty Principle, Observations on the.	
JULIUS SUMNER MILLER and MARGARET B. LEHMAN	147
Fresh Water from Salt Water Forseen, Cheap	564
Fresh Water from Salt Water Forseen, Cheap. Frost Damage in Citrus Fruit Can be Detected by X-Ray	429
Fuels to Produce Old Fuels, Plant to Use New	233
Fuels to Produce Old Fuels, Plant to Use New. Fundamental Processes, The Role of Meaning in Teaching the. HERBERT HANNON.	83
a undaniental a rocesses, and note of racaning in reaching the racaning the racanin	CO
G	
General Science be so General?, Should. PAUL D. PREGER, JR	710
Geography Tests	689
Geography Tests	213
Geometrical Construction of the Alphabet, The. GENE DOLNICK, DAVID KUPPER-	-10
MAN and WADDEN SANDEDGON	119
MAN, and Warren Sanderson	10
Cibbordin Vorumith Plants Effects of	393
Gibberellin Vary with Plants, Effects of	393
Graduate Courses for the High School Chemistry Teacher, The Status of Special.	101
W. G. KESSEL	404
	55
	68
Grass Influences Moisture Loss from Soil, Length of	504
Gravity Measurements Made on Sea Surface from Sub, First	204
Gyroscope with Virtually Perfect Accuracy, Develop	414
.,	
H	
Health Education in Colleges, Teaching. MERRILL R. WISEMAN.	187
Heart Cases Helped by "Balloon" X-Ray Method	71
Heat-to-Electricity Converters Show Promise, New	713
Heavy Water, Find Way for Cutting Costs of	557
Heavy Water, Find Way for Cutting Costs of	60
High-School Science Backgrounds of College Freshmen. CLEM W. THOMPSON	290
	212
	319
Humidity Affects Life Span of Infectious Bacteria	528
	222
Hydrogen Ion Confirmed, Complex	124
1	
I-G-Y Means Knowledge. MAITLAND P. SIMMONS	41
	502

Illinois Council of Teachers of Mathematics, 1958 Sectional Meetings of the	306 308 453 340		
1			
Jet Scientists, How Seals Dive Helps.  Journals Needed.  Junior High School Mathematics, University of Maryland Study of	60		
Junior High School Mathematics, University of Maryland Study of	732 163		
Julior High School Mathematics, Chiversity of Maryland Study of	100		
L			
Laboratory Activities in Critical Thinking for High School Physics. Almond C.	502		
FAIRFIELD.  Lavoisier: A Study of Achievement, Antoine Laurent. Gordon E. Noble	503 593		
"Light Up" Technique Spots Communicable Disease, New			
"Liquid String" Study Aids Research on Synthetic Fibers			
Living Habits Can Spell Cancer; Prevention New Emphasis	635		
M			
Machine Can Think Like Human Brain, "Startling".	739		
Machine Think? Can a. EDMOND P. ODESCALCHI	667 223		
Man's Energy Sources. Gerald Osborn.  Mathematics in General Education. John C. Bryan.	249		
Mathematics Library, Building the Secondary School. JACK N. SPARKS and KENNETH			
TAYLOR. Mathematics, Senior High School. MARC A. LAFRAMBOISE	56		
Mathematics, Senior High School, MARC A. LAFRAMBOISE.  Mathematics Teacher Education, Promising Practices in. John A. Brown	655 435		
Mathematics Teacher Education, Promising Practices in: A Report from the Mid-	400		
west Regional State College Conference on Science and Mathematics Teacher			
Education. John A. Brown.	25 104		
Mathematics Teachers, Summer Fellowships for .  Mathematics Units and Success in a College of Education, High School. WILBUR	104		
WAGGONER	650		
WAGGONER. Mathematics, What's Wrong With. CECIL B. READ.	181		
Mean Effective Current in Elementary Physics Classes, Presenting. HARRY C. WOLFSON.	692		
Meat Spoilage Problem Attacked.	671		
Men Are Physically Able to Travel in Space Now	134		
Metal-Glass Fiber Makes Plastic Stronger, New.	466		
Meteorite Craters May Once Have Covered Earth	702 549		
Method of Advancing Centroids Applied to Graphic Determination of Mean Values	2.47		
and Moving Averages, The. S. I. ASKOVITZ	644		
Michigan Council of Teachers of Mathematics	340 315		
Milky Way Galaxy Is Expanding, Discover Center of	553		
Mind, Mathematics and Machines. G. T. HUNTER	191		
Models Depicting Some Groups of Movements, Lindsay L. Hess	585		
Models of Regular Solids, Plastic and String. R. F. Graesser.  Molecular Models, A Universal Center for. George K. Estok.	367 70		
Motivation of Engineers and Scientists, Social Factors in the. Donald C. Pelz	417		
N			
	190		
National Observatory, New Group Will Operate  National Science Foundation Announcement of Academic Year Institutes for High	190		
School Teachers of Science and Mathematics	227		
Nature in Man's World, The Place of. PAUL SHEPARD, JR.	394		
New Times, New Tasks. T. M. STINNETT.  Nylon Tube Makes Nerves Grow Again.	511 384		
	001		
Objectives in Mathematics Parking Program T. Program	333		
Objectives in Mathematics, Ranking. Brother T. Brendan Ocean "River" Mapped Below Equatorial Current	643		
1+1 (One plus One). Sylvia Russell Heimbach	722		
One Answer. WILLIS SWALES, JR	357		
Oral Insulin May Prevent Diabetes	389		
P			
Paper from Filaments of Fungi, Invent Method for Making	110		
Parabolic Functions. J. S. Georges	138		

Parapsychology and ESP. John G. Read.  Paths of Projectiles. Robert C. Yates.  Personal Problems of a Science Student. Louis J. Cantoni.  Phone Calls and TV Show to be Sent Simultaneously.	432 390 217 564
Physics Education at the Elementary, Secondary, and Collegiate Levels, Coordina-	
tion of, Marsh W. White	520
Planets Seen Safe for Humans, Landing on	541 604
Polio Cases Down 80% in Two Years, Paralytic	162
Polio Cases Down 80% in Two Years, Paralytic Problem Department. Margaret F. Willerding 72, 153, 234, 320, 410, 491, 567, 656	, 745
Problem Department—1957, SCHOOL SCIENCE AND MATHEMATICS. CHARLES W.	
TRIGG.	448
Problem of the Balanced Cylinder, The. Stanley M. Barnes	132 490
Projection Rule. D. L. Showley	201
Protection Against TB, New Drug Promises	319
R	
Radiation for Long Life, Multipole Switch Uses	43
Radiation Slows Down Aging in Dogs.	.694
Radiation Slows Down Aging in Dogs	346
Radioactive Injected Pine Trees Felled, Examined, First	674
Radioactivity Measures Jet Nozzle Wear.	528
Rare Gas Mixture Gives Better Fluorescent Lamp.  Reading in Elementary Science, Building Backgrounds for Improving. MARY E.	89
CEDARS	385
Recent Research in College Science Teaching, Implications of. W. C. Vandeventer Recent Research in College Science Teaching, Survey of. Beth Schultz	630 624
Recent Research in Conege Science Teaching, Survey of Bern School Science Education, Implications of Muriel	024
REUSCHLEIN	610
Recent Research in Elementary School Science Education, Survey of. JACQUELINE	
BUCK MALLINSON Recent Research in Secondary School Science Education, Implications of the Find-	605
	619
ings of. Prevo Whitaker.  Recent Research in Secondary School Science Education, Survey of. Herbert A.	019
SMITH	613
Recent Research in Science Education, Symposium on. George G. Mallinson Relativistic Concepts, Teaching the. E. J. Konopinski	605
Relativistic Concepts, Teaching the. E. J. KONOPINSKI	454
Relativity for High School, GLEN B. VANNATTA	463
Relativity in High School Physics. RICHARD HAMMOND.  Relativity, Teaching the Major Concepts of, George G. Mallinson.	461 454
Relativity, The Teaching of the Concepts of. ROBERT LAGEMANN	460
Reorganization of College Mathematics, Plans for the. H. VAN ENGEN	277
S S	F.0
Satellite Will Not Rival Red One, U.S	52 559
School Camp—A Part of the Total Conservation Program, The. MARJORIE C.	237
McDaniel	293
Schools Can Do Immediately Under Present Conditions to Help Meet the Problems	
in Science Teaching, What. STEVEN J. MARK	558
Science and Mathematics in a Free World, The Challenge of. Louis Panush	165
Science and Mathematics in the Soviet Ten-Year School, ELLSWORTH S. OBOURN	514 697
Science and Technology in Western Civilization, The Meaning of. CARL F. KLOCKSIN Science Education, Improvement of. RANDALL M. WHALEY	517
Science Education in Louisiana Schools, Priorities in Reappraisal for. E. W. RAN-	
DALL and WM. F. BRAZZIEL, JR.	733
Science Education, The Objective of. NORRIS W. RAKESTRAW	720
Science Fairs to Find Young Scientists, More New	167 66
Science in History Classes, Schools Urged, Study Science in the Junior High School, I. B. Kelley	135
Science in the Junior High School. J. B. Kelley. Science Stories for Young Readers, Needed: MERCEDES HANLON.	677
Science Students, Survey of	201
Science Teacher Award in Michigan, Outstanding	547
Science Teacher Award in Michigan, Outstanding Science Teacher Education, Promising Practices in: A Report from the Midwest Regional State College Conference on Science and Mathematics Teacher Edu-	
cation. George G. Mallinson. Science Teachers Evaluate Science Teachers. Leonard A. Ostlund.	13
Science reachers Evaluate Science reachers. Leonard A. Ustlund	125

Science Teaching Methods and Techniques, What's Newest in. Walter J. Gohman Scientific Achievements and Scientists I Should Know. Mildred Campbell Scientific Methodology, A Simplified Approach to the Problem of. W. C. Van De-	542 453
VENTER Scientific Potential: Research Findings, A New Source of, George G. Mallinson.	97 523
Secondary Science and Mathematics, Good News and Not So Good—About Semi-Micro Chemistry—Are You Converting? MARC A. SHAMPO	633
	634
Series Resonance. Harald C. Jensen. Shortage of Scientists, Efforts to Meet the Critical. C. J. Overbeck.	472
Smog Irritation Is Relieved by Ammonia	204
Sound Waves Improve Chromium Plating.	132 539
Space Research Will Benefit Average Man Immediately Space Ship Around Moon, Proposed Synthetic "Air" for	96
Standing Waves in a Wire. HARALD C. JENSEN	90
Star Diameter, First Instrument Measures	584
State Level Approach Toward Improving Science Education, A. BRUCE K. NELSON	256
Steel Lets Magnetism Turn Corners, New Kind of	96
Student 1957—Chemist 1965. J. R. HOWELL.	445 53
Study of Classification in the Elementary Grades, Begin a. Alphoretta Fish Sugar Preserves Dairy Cream	107
Summer Institutes for High School and College Teachers of Science and Mathematics, Foundation Announces 108.	244
Sun Has Magnetic Halo for Storing Cosmic Rays	466
Superhighway-Monorail System May Carry Future Travelers	448
Surgical Thread Gets Atomic Sterilization	431
T	
TB Cases Are Still Unrecognized, 40% of Active.  Teacher Education Today for the Science and Mathematics Teachers of Tomorrow Teacher Education Today for Science Teachers of Tomorrow. JOSHUA R. C. BROWN Teachers for Science Teaching in the Elementary School, Preparing. BLOUGH,	174 434 509
Glenn O	524
Teachers of Arithmetic, Preparation of. DAVID RAPPAPORT	636
Teachers Study by Color TV, High School.  Teaching Aid for the Generalized Law of the Mean, A.  Teaching Device for Geometry Students, A Quadrilateral. STANLEY B. BROWN and	152
ROBERT S. ARMSTRONG.	506
Evaluation Experiment. Betty J. Barth, Joseph C. Payne, and Newton G.	000
Sprague	202
Tests in Mathematics, Short. R. F. Graesser	65
Tranquilizers No Cure for Mental Troubles	216
U	
Ultraviolet Lamp Kills Flu Bug at Home, New	162
V	
Variable High Voltage DC Supply. Harald C. Jensen.  Vital Minerals, U. S. Self-Sufficient in Only Two of 32.  Vitamin C Spray Protects Plants Against Smog Damage.	338 534 403
w	
	520
Weather Pattern Needed to Spawn Tornadoes, Definite "What's New". A. W. Carlson Why Didn't They Tell Me? Cecil B. Read	539 347 695
X	
	2012
X-Ray Unit Spots Flaws in Rocket Fuels, Tiny	393

## INDEX BY AUTHORS

A	
ABRAHAMS, HAROLD J., Central High School, Philadelphia, Pa	1
AEBERLY, JOHN L. Bureau of Heating, Ventilation and Industrial Sanitation, City	
of Chicago, Chicago, Ill	
brarians	8
ARMSTRONG, ROBERT S., University of California, Berkeley, Calif. 50 ASKOVITZ, SAMUEL I., M.D., School of Medicine, University of Pennsylvania, Phil-	
adelphia, Pa	
В	
BANKOFF, LEON, Los Angeles, Calif	6
Bardis, Panos D., Albion College, Albion, Mich	U
BARNES, STANLEY M., Wilbur Wright High School, Detroit, Mich	
BARTH, BETTY J., Indianapolis Public School, Indianapolis, Ind. 20 BATES, RICHARD H., Milford, N. V. 32	
BATES, RICHARD H., Milford, N. Y	
BEUSCHLEIN, MURIEL, Chicago Teachers College, Chicago, Ill. 610	ô
Blough, Glenn O., University of Maryland, College Park, Md	4
BOEKMANN, HERMANN, Bloomington, Ind	3
BOEKMANN, HERMANN, Bloomington, Ind. 49. BRAZZIEL, WM. F., JR., Southern University, Baton Rouge, La. 73.	
Braun, Julian H., San Diego, Calit	4
BRENDAN, BROTHER T., St. Mary's College, St. Mary's College P.O., Calif 156, 33	3
Brown, John A., State University Teachers College, Oneonta, N. Y	0
BROWN, STANLEY B., University of California, Berkeley, Calif	
BRYAN, JOHN C., North High School, Omaha, Nebr	
Burchenal, Joyce M., L'Ance Creuse High School, Mt. Clemens, Mich	
BUTLER, ROBERT, San Diego, Calif	6
С	
CAMPBELL, MILDRED, Shortridge High School, Indianapolis, Ind	
CANTONI, LOUIS J., Wayne State University, Detroit, Mich	
Carlson, A. W., E. H. Sheldon Equipment Co., Muskegon, Mich. 34 Cedars, Mary E., Roosevelt School, Kokomo, Ind. 38	
CHERRY, W. J., J. Sterling Morton High School and Junior College, Cicero, Ill 46	
CLARK, HELEN S., San Diego, Calif	
CLARK, HELEN S., San Diego, Calif	
CRUMLEY, RICHARD D., Iowa State Teachers College, Cedar Falls, Ia	
D	
DELANEY, LAWRENCE J., Cheltenham High School, Elkins Park, Pa	1
DOLNICK, GENE, Von Steuben High School, Chicago, Ill	9
Drew, Robert E., Steuben Elementary School, Kankakee, Ill	2
E	
ESTOK, GEORGE K., Texas Technological College, Lubbock, Texas	)
F	
FAGGINGER-AUER, B., Goodyear Atomic Corp., Portsmouth, Ohio	3
FAIRFIELD, ALMOND C., Hillsborough County Schools, Tampa, Fla	
FELIX JOHN, BROTHER, LaSalle High School, Philadelphia, Pa	
FERTIG, ROBERT A., Burlingame High School, Burlingame, Calif	
FILSON, MALCOLM H., Central Michigan College, Mt. Pleasant, Mich. 731 FISH, ALPHORETTA, Western Michigan University, Kalamazoo, Mich. 53	
GEORGES, J. S., Wright Junior College, Chicago, Ill	
GOHMAN, WALTER L. Iowa State Teachers College, Cedar Falls, Ia. 542	2
Graesser, R. F., University of Arizona, Tucson, Ariz	1
Gross, E. Wayne, University School, Bloomington, Ind	ı
GROSS, LUCILLE, McCalla School, Bloomington, Ind	
GROSSMAN, HOWARD D., New York, N. Y	3

11	
Hammond, Richard, Howe High School, Indianapolis, Ind	
HUNTER, G. TRUMAN, IBM Corporation, New York, N. Y	
J	
Jensen, Harald C., Lake Forest College, Lake Forest, Ill	
K	
Kambly, Paul E., University of Oregon, Eugene, Ore	
L	
Laframboise, Marc A., University of Detroit, Detroit, Mich. 108, 565 Lagemann, Robert, Vanderbilt University, Nashville, Tenn. 460 Lee, Addison E., University of Virginia, Charlottesville, Va. 521 Lehman, Margaret B., El Camino College, El Camino, Calif147 Leifer, H. R., Verona, Pa. 493 Lockwood, J. Bryce, Highland Park Junior College, Highland Park, Mich. 79, 80, 328, 415, 582, 665, 666	
M	
MALLINSON, GEORGE G., Western Michigan University, Kalamazoo, Mich.  13, 80, 81, 360, 454, 523, 582, 582, 605, 751, 752  MALLINSON, JACQUELINE BUCK, Kalamazoo, Mich.  297, 605  MARBURGER, WALTER J., Western Michigan University, Kalamazoo, Mich.  330  MARK, STEVEN J., Kent State University, Kent, Ohio.  558  MAZKEWITSCH, D., University of Cincinnati, Cincinnati, Ohio.  213, 703, 745  McCormick, Clyde T., Illinois State Normal University, Normal, Ill.  490, 567, 654  McDaniel, Marjorie Causey, Indiana State Teachers College, Terre Haute, Ind.  293  McLain, Stuart, Argonne National Laboratory, Lemont, Ill.  261  McShane, E. J., University of Virginia, Charlottesville, Va.  442  Meder, Albert E., Executive Director, Commission on Mathematics.  435  Messerve, Bruce E., Montclair State Teachers College, Upper Montclair, N. J. 329, 437  Meyerhoff, Howard A., Scientific Manpower Commission.  509  Miles, Wyndham D., U. S. Army Chemical Corps Historical Office, Army Chemical Center, Md.  111  Miller, G. H., Western Illinois University, Macomb, Ill.  714	
MILLER, G. H., Western Illinois University, Macomb, Ill	
N	
NELSON, BRUCE K., Eastern Michigan College, Ypsilanti, Mich.       256         NELSON, PEARL ASTRID, Boston University, Boston, Mass.       354         NOBLE, GORDON E., Central High School, Kalamazoo, Mich.       593	
0	
OBOURN, ELLSWORTH S., U. S. Office of Education, Washington, D. C	

PANUSH, LOUIS, Henry Ford High School, Detroit, Mich	, 316 202 417 727 562 286 93 710
R	
RAKESTRAW, NORRIS W., Scripps Institute of Oceanography, University of Cali-	
fornia La Iolla Calif	720
RAND, E. W., Jarvis Christian College, Hawkins, Texas.  RAPPAPORT, DAVID, Chicago Teachers College, Chicago, Ill	733 636
READ, CECIL B., University of Wichita, Wichita, Kan.  161, 181, 241, 242, 243, 331, 430, 554, 695 READ, JOHN G., Boston University, Boston, Mass. RICHERT, A. S., East High School, Wichita, Kan.	750
READ JOHN G. Roston University Roston Mass	432
RICHERT, A. S., East High School, Wichita, Kan.	500
ROBINSON, THANE S., Western Michigan University, Kalamazoo, Mich.	161
e e	
Carrowness Wanner Von Stauben High School Chicago III	119
SANDERSON, WARREN, Von Steuben High School, Chicago, Ill	371
SCHULTZ, BETH, Western Michigan University, Kalamazoo, Mich.	624
SHEPARD, PAUL, JR., Knox College, Galesburg, Ill	394
SHEPARD, PAUL, JR., Knox College, Galesburg, Ill SHAMPO, MARC A., Duquesne University, Pittsburgh, Pa	723
SHAW, P. W., San Diego, Calif	411
Showley, D. L., Scottsdale High School, Scottsdale, Ariz.	201
SIMMONS, MAITLAND P., Irvington High School, Irvington, N. J.  SMITH, HERBERT A., University of Kansas, Lawrence, Kan.	613
SPRAGUE, NEWTON G., Indianapolis Public Schools, Indianapolis, Ind.	202
SPARKS, JACK N., Leyden Community High School, Franklin Park, Ill	56
SPENCE, JOHN L., Corpus Christi, Texas	674
SPENCE, JOHN L., Corpus Christi, Texas. STEARNS, RICHARD E., Carleton College, Northfield, Minn	362
STEWART, NATHANIEL, Bureau of Ships, U. S. Navy Dept., Washington, D. C.	175
STINNETT, T. M., National Commission on Teacher Education, Washington, D. C.	511
STRICKLAND, WARREN, Corpus Christi, Texas.  SUELTZ, BEN A., State University Teachers College, Cortland, N. Y.	441
SWALES, WILLIS, JR., Hillside High School, Hillside, N. J.	357
T	
TALBOT, W. R., Jefferson City, Mo	137
TAYLOR, KENNETH, Leyden Community High School, Franklin Park, Ill	56
THOMPSON, CLEM W., Boston University, Boston, Mass	290
154, 321, 448, 492, 570, 572,	659
	-
U	
UREY, HAROLD C., University of Chicago, Chicago, Ill.	168
V	
VANDER REEK, LEO C. Western Michigan University, Kalamazoo, Mich. 449.	580
VANDER BEEK, LEO C., Western Michigan University, Kalamazoo, Mich	630
Van Engen, Henry, University of Wisconsin, Madison, Wis	277
VANNATTA, GLEN D., Broad Ripple High School, Indianapolis, Ind	463
VICTOR, EDWARD, Northwestern University, Evanston, Ill	550
W	
WAGGONER, WILBUR, Central Michigan College, Mt. Pleasant, Mich	650
WARNER, GLEN W., Lakeville, Ind.	581
WARNER, GLEN W., Lakeville, Ind. WESTMEYER, PAUL, University of Illinois, Urbana, Ill. WESTMEYER, PAUL, University of Sciences, National Research Council	560
	517
WHITAKER, PREVO, University of Indiana, Bloomington, Ind.	619 520
WHITE, MARSH W., Pennsylvania State University, State College, Pa	320
72, 153, 234, 320, 410, 491, 569, 656,	745
WILLIAMSON, DONALD A., Bethesda-Chevy Chase High School, Chevy Chase, Md	10
WINTHROP, HENRY, University of Wichita, Wichita, Kan	449

WISEMAN, MERRILL R., Western Michigan University, Kalamazoo, Mich	
, у	
YATES, ROBERT C., The College of William and Mary, Williamsburg, Va	390 535
Z	
ZIMMERMAN, ELAINE, Western Michigan University, Kalamazoo, Mich	243

3